The ABI Guidelines for Share-Based Incentive Schemes. Setting the hurdle too high?

Brian G M Main

University of Edinburgh School of Management

March 2002

ABSTRACT

The ABI Guidelines for Share-Based Incentive Schemes. Setting the hurdle too high?

Brian G M Main[1], University of Edinburgh School of Management.

This paper examines, from the perspective of the pay-performance connection, the guideline principles recently issued by the Association of British Insurers (ABI) in connection with the operation of share-based incentive schemes. The four main dimensions to these guidelines concern: (i) phasing of issue by use of regular awards; (ii) setting of performance criteria (hurdles) against a peer group or bench-mark; (iii) restricting any re-testing of satisfaction of such performance criteria; and (iv) instituting a sliding scale of reward contingent on the performance out-turn against criteria. Emphasis is also placed on the accounting recognition challenge of reporting to shareholders the expected value of such rewards. Results are derived from a simulation over a 14 year period of the implementation of such guidelines in a sample of companies traded on the London Stock Exchange. Empirical results suggest that the pay-performance connection is not always made stronger by setting the hurdle ever higher, and that higher hurdles are best tempered by generosity in terms of re-testing and re-issue of options. The saving of expense on such packages may be bought at the expense of a weakened pay-performance connection at board level.

[1] The author would like to thank Paul Draper and Guy Jubb for helpful comments and advice in the preparation of this paper. Remaining errors are my own.

1. Introduction

Since the passage of the Finance Act 1984, Executive Share Options (ESOs) have become an increasingly important component of executive remuneration. In addition to the tax advantages initially available by satisfying some relatively mild conditions, this means of remuneration continues to hold out the possibility of achieving a clear link between the executive's pay and company performance. From the initial outbreak of enthusiasm for this means of executive remuneration, the prospect of equity dilution through over zealous use of such schemes prompted institutional shareholders to take an interest. In particular, the Association of British Insurers (ABI) has, through the promulgation and dissemination of various codes of practice[2], emerged as the lead organisation in the regulation of these share-based incentive schemes.

The most recent set of consolidated ABI guidelines was issued in March 2001 and comes after a prolonged process of external scrutiny of top executive pay practices and procedures. A process which through the Cadbury (1992), Greenbury (1995), and Hampel (1998) reports can best be described as self-regulation[3], although the recent proposal for the reform of company law in this area[4] represents a rare government intervention. One consequence of these various reports, and the Greenbury Report in particular, was to move companies away from ESOs towards more complex Long Term Incentive Plans (Ltips)[5]. Nevertheless, ESOs remain empirically important and continue to provide a standard against which other incentive pay schemes may be judged.

The new ABI (2001) guidelines mark a fairly radical departure from what has gone before. The detail of the development of these guidelines and the way in which they provide guidance to boards and remuneration committees is provided below but, in essence, the novelty comprises a move away from using the 'four-times-emoluments' guide as to a ceiling for option issue towards encouraging a 'phasing' of ESO issue in a regular manner in preference to having a somewhat lumpy issue once every three or four years. Markedly more emphasis is now placed on setting challenging performance criteria (or 'hurdles') before the ESOs vest, and performance is to be on a relative basis, using peer groups or performance bench marks. One version of a challenging performance criterion mentioned but not specifically required in the ABI guidelines, and certainly commonly touted in the business press, is the issue of executive share options with a strike price that is at a 'premium' to the market price. This alternative will also be examined below.

---

[2] See, for example, Association of British Insurers (1987, 1991, 1993, 1994, 1995 and 1999).

[3] Blundell and Robinson (1999) provide an extensive discussion on the prevalence and potential of such arrangements in the economy.

[4] The main proposal being that shareholders should be allowed to vote on the report of the remuneration committee. See the original discussion paper DTI (1999).

[5] For an examination of the impact of this move to Ltips, see Buck, Bruce, Main and Udueni (2001).

In addition, remuneration committees are discouraged from permitting a second or further chance to meet the performance conditions ('re-testing') if they are not fully satisfied at the first opportunity[6]. Finally, the reward for the attainment of targets is encouraged to be on a sliding scale (where the reward or proportion of options vesting increases with the level of performance once a certain threshold is surpassed). In all of this, it should be stressed that the actual ABI guidelines nowhere prescribe the behaviour of remuneration committees. Recommendations only are given[7], exceptions are permitted, and remuneration committees and boards are free to depart from these guidelines.

Emphasis is also placed on reporting to shareholders the expected value of such rewards. This suggests a move away from the current practice of neither reporting[8] nor recognising the cost of servicing ESOs, a move which is wholly consistent with recent government proposals to bring reporting of executive pay more in line with the SEC (1993) regulations that apply in the USA. This challenge does, of course, highlight the difficulty of assessing the impact of the ABI guidelines on the pay-performance linkage confronting the executives being remunerated under such schemes[9]. There are sufficiently many inter-related conditions suggested by the new ABI guidelines that the question of evaluating their performance on the pay-performance rlationship looks intractable in terms of a theoretical approach. We are, therefore, forced to adopt a more empirical method of estimation whereby various combinations of the guidelines are simulated on data from a given set of companies.

This paper adopts an empirical approach to the study of the issues raised here, by conducting several simulations of the implementation of these guidelines in a sample of companies traded over a 14 year period on the London Stock Exchange. The method involves adopting various particular specifications of the guidelines and by applying them in each company to a representative chief executive at the start of 1984 and computing the reward that this person would earn under each specification as the 1984-1997 period unfolds. The fortunes of such representative executives in a sample of some 244 companies traded on the London Stock Market over the period is then used to produce an average picture. For each of the hypothetical company chief executives, the pay performance correlation is analysed to produced a summary measure of how each configuration of the guidelines fares.

In the following section of the paper, some background information is provided concerning the development of the ABI guidelines over the years. This is then followed by a section which explains how the empirical data are constructed. The next section

[6] Options typically vest after three years and the performance period is usually the most recent three or four-year period.

[7] This is seen, for example, in paragraph 2.1 of the Guidelines which states 'Remuneration committees are expected to have regard to these Guidelines in developing and implementing share incentive schemes.'

[8] In fact, UITF (Abstract 10) of the Accounting Standards Board (1994) does require basic option-related information to be reported in a footnote to the accounts.

[9] For earlier work examining the pay-performance relationship brought about by executive share options, see Main, Bruce and Buck (1996) and Yermak (1995). And for a discussion of UK policy in this area, see Main (1999).

then presents an analysis of the results obtained and the papers ends by offering some policy discussion in the light of the conclusions that can be drawn from these results.

2. Background to the ABI guidelines

In an attempt to foster the adoption of a more explicit culture of performance related pay in the board room[10], the government of the day introduced the concept of 'approved share option schemes' under the Finance Act 1984. Until this point, any gains from ESOs were treated as income and taxed accordingly (up to a rather punitive top rate of 83% in early 1979). Although the top rate of income tax was reduced to 60% in 1979, the prospect held out by the Finance Act 1984 was that ESOs operating under certain restrictions could have their gains taxed as capital gains (which then faced a more attractive 30% tax rate). The principal restriction imposed by the Inland Revenue, in order to limit the tax expenditure implications of this concession, was that the face value (the exercise price times the number of shares under option) of options issued under such schemes should be limited to four times the annual emoluments of the relevant executive[11].

With the vast majority of ESOs being serviced through shares by subscription (newly issued shares) rather than by acquisition (open market purchase), and with shares by subscription being neither recognised nor reported in the earnings statement, Institutional shareholders were alarmed at the prospect of equity dilution[12]. In drawing up a set of guidelines, the ABI seems to have reached for the existing Inland Revenue Code. The ABI guidelines were almost universally adopted[13], to the extent that it almost became a rule or an entitlement that all executives at board room level would be issued with options to the value of four times emoluments. The fact that such a uniform distribution of ESOs is unlikely to represent an efficient outcome in terms of providing individual executives with the appropriate incentive - a situation that is likely to vary from company to company and, indeed, executive to executive - was highlighted by Main (1994). Admittedly, revised ABI guidelines subsequently included provision for so-called 'super options' at eight times emoluments but the performance conditions[14] were sufficiently steep to deter most companies from using them.

[10] Performance related pay can be viewed as part of the contractual approach to corporate governance (see Shleifer and Vishny (1998) and Baker, Jensen, and Murphy (1988) for a more detailed review and discussion).

[11] There were also Inland revenue conditions requiring a minimum three year vesting period and a maximum 10-year life. Annual emoluments are roughly base pay plus bonus with an allowance for the cash equivalent of benefits in kind.

[12] One impact of the Greenbury and Hampel reports has been a reversal of this pattern and an increased propensity to use market purchases of share to meet vesting of awards under Ltips and ESOs.

[13] Main (1993) provides a description of the organisational arrangements for pay setting in the board room.

[14] These demanded a minimum vesting period of five years and growth in earnings per share that placed the company in the upper quartile of the FTSE-100 performance.

Although the intention of the ABI was always that their guidelines should be used by boards and remuneration committees to guide their remuneration policy, a succession of revisions (concerning issues such as the entitlement to reissue options within a ten year period if a previous tranche had been exercised) resulted in these very ABI guidelines effectively being used as the 'rules' by boards and remuneration committees. This in spite of the fact that any tax advantage gained by adhering to the original Inland Revenue conditions for approval had to a large extent swept away with the Finance Act 1988 which not only reduced the top rate of income tax to 40% but harmonised the tax payer's capital gains tax with their marginal income tax rate[15]. Only with the Greenbury Report (1995) did the ABI guidelines lose their pre-eminence, and then only due to a movement by companies toward Ltips and away from ESOs. The latest ABI (2001) guidelines can be seen as an attempt to include all share-based executive incentive schemes[16], but it also represents a marked departure from its previous implicit one-size-fits-all approach. Companies are now free to issue options at some proportion of an executive's base pay and to do so on an annual basis. In return, however, perhaps stung by the widespread past criticisms of what are widely (but often incorrectly[17]) perceived to have been unnecessarily generous ESOs, the ABI has included some strong encouragement toward the inclusion of demanding performance criteria. These criteria are required to be relative to a peer group of companies or to some benchmark performance standard.

The salient aspects of the new guidelines are as follows:

(i) condones the move away from the traditional option scheme with its four times emoluments limit towards phased grants - on an annual or some other regular basis: ('PHASING').
(ii) the use of challenging performance criteria relative to an appropriately defined peer group or other relevant benchmark, with total shareholder return being acceptable as the primary criterion where it is supported by a defined secondary financial criterion, e.g. earnings per share . Performance criteria should demand median level performance but with a sliding scale towards superior performance: ('RELPERF').
(iii) a single predetermined performance measurement period is encouraged and the ability to 'retest' performance over successive periods if performance originally falls short is discouraged: (no 'RETESTING').
(iv) while the issuing of options with a strike price at a premium to the prevailing market price is not accepted as a substitute for performance conditions, i.e. performance hurdles, it is mentioned: 'PREMIUM'.

[15] The residual tax benefit lay in avoiding any tax until the underlying shares themselves were sold (as opposed to the options being exercise) and the tax shield provided by the annual capital gains tax allowance - something most senior executives are likely to have exhausted in any case).
[16] And, indeed, in recent years there has also been a swing back to executive share options in preference to the complexity of Ltips.
[17] See Main, O'Reilly, and Crystal (1994) and Conyon and Murphy (2000) for some comparative evidence on CEO pay.

As indicated above, the new guidelines emphasise the importance of providing some notion of the expected value of the awards granted from the outset. Under the UITF(Abstract 10) guidance of the Accounting Standards Board (1994), the annual accounts are required to contain the basic information that might allow the calculation of such values, but the reality is that the existence of performance conditions and other restrictions ensure that only the most approximate of estimates can be made from these data.

The main thrust of all of the regulations is investor protection through avoidance of hidden liabilities in executive contracts and to ensure that the executive earns any shares awarded. No attempt is made in the UK to inhibit executives from counteracting the incentive aspects of ESOs by taking a countervailing position in the company's shares through hedging in the derivatives market, although Company Law requirements on the disclosure of contract for difference may effectively rule out such actions. In the USA, Schizer (1999) explains the general absence of such behaviour as a generally accidental outcome of the tax code. Boards in the UK are, however, enjoined from reissuing options that are 'under water', a practice that, nevertheless, Samuels and Lymer (1996) documented[18] in practice.

The following section of the paper explains the approach adopted here to gauge the empirical impact of the guidelines sketched above for the connection between executive pay and performance. We also provide some information regarding the expected costs of various aspects of the new guidelines.

3. Empirical Estimation

The Risk Measurement Services Data Archive between March 1984 and March 1997 is used as the source of company observations. To provide comparable data and to allow the executive portfolios of share options to accumulate companies with a continuous availability of share price, shareholder return and earnings per share data are selected. This yields a sample of 244 companies. Due to the data requirements imposed, there will, of course, be a survivor bias in this sample and no claim can be made general applicability of the levels of the pay-performance connection estimated. Nevertheless, it remains useful to study the *relative* impact of the changing versions of the ABI guidelines on the pay-performance relationship in this sample.

In each case, the approach adopted is to follow a hypothetical Chief Executive Officer (CEO) in each company over the entire period. The CEO is assumed to receive £100,000 per annum in emoluments (in £1997) and for various combinations of the ABI guidelines an ESO portfolio is accumulated and monitored over the period. Clearly, for the first four

[18] It is interesting to note, in this context, that recent work by Hall and Murphy (2000) demonstrates that this can often be in the interest of both the company and the executive for such re-issues to take place.

years the ESO scheme, portfolios simply accumulate, but thereafter it is possible to generate measures of total remuneration as the various vintages of options conditionally vest and are exercised according to the particular combination of ABI guidelines being studied. For each possible combination of guidelines, therefore, it is possible to generate 244 observations over some 10 years in terms of the pay outcome for the executives and the respective performance of the companies involved. Various descriptive and summary statistics of the pay-performance relationship that emerged can then be studied.

As one of the key considerations in the ABI guidelines is the concept of relative performance, it is also necessary to generate a performance bench mark. The alternative would have been to define a peer group for each of the companies and to measure each company's performance against its particular peer group. This, however, would introduce an additional degree of heterogeneity in an exercise that is attempting to reach some general observations regarding the impact of the ABI guidelines. It was, therefore, decided to use common benchmarks for the two performance variables, total shareholder return and growth in earnings per share. Performance at the median and upper quartile of the FTSE-100 companies is a widely used standard[19]. This is available for the RMS data base. Before June 1986, however, there was no FTSE-100 marker and in its place membership of the FTA Share Index is used. But for the majority of the time period under study, performance is measured relative to the median (for any vesting) and the upper quartile (for full vesting) of the FTSE-100.

As explained above, the main dimensions of ESO schemes examined include: the phasing of option issue ('PHASING'); the use of meaningful relative performance criteria ('RELPERF'); re-testing allowed of attainment of performance hurdles ('RETESTING'); options issued at a premium to the market ('PREMIUM'); new issues of ESOs as and when the CEO qualifies under any phasing condition ('NEWISSUE'). In each of these scenarios, the year-to-year valuation of the outcomes is measured and, in addition, the year-to-year variations in the executive's wealth as measured by the Black-Scholes-Merton valuation of the ESOs is calculated[20]. The first approach presents an ex-post view of remuneration, and the second an approximate accounting valuation of the contemporaneous changes in CEO wealth over the period.

In total, there are six variations of ESO package design that are tested. These are delineated in Table 1.

[19] The use of the FTSE100 is becoming less popular than custom designed peer groups of comparator companies.

[20] The Black-Scholes-Merton valuation of executive share options has long been known to be at best a crude approximation of the value to the executives, although slightly nearer the cost to the company (see Clark and Main 1995, p. 66).

Table 1
Basic Modes of ESO Investigated.

Characteristic	Scheme Version Label					
	A	***B***	***C***	***D***	***E***	***F***
PHASING	No	Yes	Yes	Yes	Yes	Yes
RELPERF	No	No	Yes	Yes	Yes	Yes
RETESTING	Yes	Yes	Yes	No	Yes	No
PREMIUM	No	No	No	No	Yes	Yes

A: Base model (traditional 4 times emoluments ceiling)
B: Phasing of option issue (1 times emoluments annually).
C: Phasing of option issue (1 times emol. annually) plus Performance criteria.
D: As 'C' plus no Re-testing.
E: As 'C' plus Issue at a Premium.
F: As 'C' plus no Re-testing and Issue at a Premium .

There are, clearly, more than six combinations of the conditions listed above, but these combinations seem the most obvious to test in terms of the pay-performance relationship the various conditions produce. In terms of the performance criteria, the options vest (and are assumed to be immediately exercised) only after a minimum holding period of four years. This is longer than the usual official three-year condition, but the complication of closed periods for director equity transactions and other institutional features suggest that this is not too far from reality. When relative performance conditions apply, the vesting is dependent on the company in question attaining both: (i) at least median performance on total shareholder return; and (ii) an annual growth in earnings per share of retail price index plus three percentage points[21] over the previous three years. The extent of the vesting is decided on a pro-rata basis[22] with median total shareholder return earning 0% of entitlement and upper quartile earning 100%. For those circumstances in which share options are issued at a premium exercise price, the premium assumed is the current market price on the day of issue plus 25%.

4. Analysis of Results

Restricting the sample to non-financials, a total of 244 companies in the Risk Measurement Services Data Archive are found to have complete data on share price,

[21] In recent practice, rpi+3%, or even rpi+4%, is not uncommon.
[22] Although the actual guidelines refer to 'sliding scales between top quartile and median performance', the initial reward at the median may start at 25% of possible shares rather than 0%, and the maximum 100% vesting may occur at top quartile performance, thus resulting in performance-pay 'flat-spots'.

volatility, and earnings per share in the period 1984 through 1997. A list of these companies is given in Appendix A. For each company, a representative Chief Executive Officer is treated as having and annual base pay of £100,000 (in £1997). This simplification plays no role in the subsequent analysis, which focuses on the proportional change in remuneration for change in company performance. Starting in 1984 each executive is followed through 1997 and, depending on the exact set of rules in place (see Table 1), that executives qualification for share options is monitored and their options holdings valued on a yearly basis with the appropriate exercises, lapses, and new issues duly recorded. The first four years of data are necessary to bring the executive's into an 'equilibrium' state in terms of the option plans (as a three year minimum vesting period produces an effective four year cycle on such schemes), and this leaves 10 years of data for analysis.

Two pay variables are computed. The first, labelled 'Pay', is simply the base pay plus any realised option gains from the executive share option holdings. Thus:

$$Pay_t = (BasePay)_t + \sum_{j=1}^{t-4} \left(NEX_{j,t} \middle| P_t \geq SP_j \right) \left(P_t - SP_j \right) \qquad (1)$$

Where,

P_t = prevailing share price at time t
SP_j = strike price of options issued at time j
$NEX_{j,t}$ is the number of share options of vintage j that are exercised in period t.

The second pay measure is more complex than the out-turn measure presented above. This second measure, labelled 'Pay2', includes all the realised and unrealised gains to the option holdings of the executive in the relevant year. This is done by using a Black-Scholes-Merton approach to place a crude market value on the option holdings of the executive at each year-end in the history. As discussed above, it is recognised that for well-known reasons this can only be an approximation to the wealth enhancement of the executive due to ESO holdings. Most obviously, the change in wealth so measured ignores the fact that the options being valued may not have vested, that the options cannot be traded but only exercised by the nominated executive, and that there is an additional risk owing to the chance of the executive being fired or the company being taken over[23].

Thus 'Pay2' can be written:

[23] This is a much overstated problem as, in reality, most executives in a change of control situation or even in a loss of job situation (e.g., if deemed a 'good leaver') are allowed to exercise their outstanding options - often earlier than the original vesting requirements.

$$Pay2_t = (BasePay)_t + \sum_{j=1}^{t-1} Number_{j,t}\left(BS_{j,t} - BS_{j,t-1}\right) + \sum_{j=1}^{t-4} NEX_j\left(P_t - BS_{j,t-1} \middle| P_t \geq SP_j\right) + Number_{t,t}\left(BS_{t,t}\right) \quad (2)$$

Where,

$Number_{j,t}$ = number of shares under option of vintage j that are held at period t. This will vary over time as some are exercised and some lapse, either due to time limitations or due to failure to attain performance-criteria hurdles that are part of the vesting requirements of the company's executive share option plan. For j = t, these are new issues. (Note that, for $j \neq t$, $Number_{j,t}$ is first reduced by $NEX_{j,t}$).

$BS_{j,t}$ is the Black-Scholes valuation of an option on the company's shares issued under the company's executive share option plan at time j and valued at time t, thus:

$$BS_{j,t} = P_t N(d_1) - SP_j e^{(r_f + r_d)T} N(d_2) \quad (3)$$

and

$$d_1 = \frac{\log\left(P_t / SP_j\right) + (r_f + r_d) + \sigma^2 T / 2}{\sigma\sqrt{T}} \quad (4)$$

$$d_2 = \frac{\log\left(P_t / SP_j\right) + (r_f + r_d) - \sigma^2 T / 2}{\sigma\sqrt{T}} \quad (5)$$

where,

N(d) is the cumulative normal distribution function.
T is the valid life remaining on he option.
σ is the volatility of the share.
r_f is the risk free rate.
r_d is the dividend yield.

Table 2 provides a time series of the sample average for these two pay variables ('Pay' and 'Pay2') over the years 1988 through 1997 as estimated under the conditions of the various sets of assumptions underlying the models, e.g., 'Model A' the raditional form of non-phased 4-times-emoluments execuitve share option grant, with no performance conditions. It can be seen from the table that, even from this sample-average perspective of executive pay, there is a substantial difference between the two measures of

remuneration. The movements in the measure 'Pay2' are more marked although less extreme than those of 'Pay'. The data are plotted in Figure 1 for each of the 6 variations of the model of executive remuneration. These will be discussed at greater length below when the connection with company performance is investigated.

Table 3 provides an initial comparison of the scheme type by presenting the distribution of total pay over the 10 years and across the 244 companies under analysis. The first thing to note is that, at the end of the day and using the mean of total pay over the 10 years, the two pay measures are remarkably close. This is exactly what is to be expected, as they are measuring the same thing, albeit in different ways. Pay gains ascribed to an executive under the 'Pay2' measure are often reversed as the company's performance falters. The 'Pay' measure, on the other hand, records only the actual gains realised (as well as base pay). As we shall see in Table 4, however, the measure 'Pay2' may do a better job in terms of revealing the connection between the executive's fortunes and those of the company. This is particularly clear in the cased of Model A, the traditional 1984-type of scheme. Here, the 'Pay' measure captures the realised gains, especially in 1988 resulting from the bull market of the late 1980s. The 'Pay2' measure is more modest because it allows for the price reversals and the price gains within a particular year.

The second point to note is that the exact design of the share option scheme has only a modest impact on the average level of pay-out. By imposing a condition of phasing (Model B) does moderate the 'Pay' measure and the lumpy realisation of capital gains. But imposing performance hurdles (Model C) has remarkably little impact. As long as re-testing of the performance hurdle is permitted, the executive is, on average, at little disadvantage through having pay tied to company performance. It is only with the imposition of a no-retesting condition (Model D) that the recorded gains in remuneration are moderated. Similarly, issuing share options at a premium to market (Model E) has a proportional if modest effect on reducing total pay. But, again, when a no-retesting condition is imposed (as in Model F) remuneration levels fall to the lowest in the sample of scheme designs.

Of course, parsimony in pay is one thing, but it may be a false economy if it is bought at the price of a diminished pay-performance relationship. It is to this that we now turn. Taking one scheme type at a time, for each of the 244 sample companies a simple regression is conducted using the 10 yearly observations (1988-97) of pay and total shareholder return for that company. Thus:

$$Pay_t = \alpha + \beta RET_t + \varepsilon_t \qquad (6)$$

The 244 estimates of the pay-performance sensitivity (β) so obtained for each scheme describe the enhancement in the executive's remuneration (£) for every percentage increase in shareholder wealth. The estimated coefficients are grouped as the lowest 10%, the lowest 25% (lower quartile), the middle 50% (inter-quartile range), the top 25% (upper quartile) and the top 10%. The average coefficient within each of these groups is presented in Table 4. The significance of the average β figure for group k is computed as

a t-statistic in the form:

$$t_k = \frac{\sum_{i=1}^{N_k} \frac{\beta_i}{\sigma_i}}{\sqrt{N_k}} \qquad (7)$$

where
N_k = the number of firms in the group k of firms
β_i = the regression coefficient estimated as in equation (6) for firm i
σ_i = the standard error of coefficient β_i in regression for firm i

Concentrating initially on the inter-quartile range values (Middle 50%), the first thing that stands out in Table 4 is the marked difference between the results for the pay measure 'Pay' and the measure 'Pay2'. Coefficients in the lower part of Table 4 ('Pay2') are, in general, several times larger than those in the upper part ('Pay'). For Model A the ratio is over 10 and is at lest 4 times the outturn pay-performance measure (Pay) in the other variants and almost seven times higher in the two models that do not allow retesting (Models D and F), thus demonstrating the potential gains that are lost when a performance hurdle is not attained.

It has already been established above (in Table 3) that these two variables capture much the same the same thing over the lifetime of any share option scheme. But the important observation here is that, in terms of gauging the efficacy of a scheme in terms of tying pay ('remuneration') to performance, the more time-sensitive measure 'Pay2', which utilises the changing value of the executive's share option portfolio by use of Black-Scholes valuations, reveals to a fuller extent the degree to which the fortunes of an executive are tied to the performance of the company. This suggests that, in terms of ABI reporting and communication with shareholders, the 'Pay2' measure may be the more obvious to use. The problem with the more straightforward 'Pay' measure is that it lacks time-sensitivity, as the realised option gains may occur substantially later than the performance that merited the reward.

The second feature to emerge form Table 4 is the very different outcomes achieved by different variants of executive share-option schemes. In terms of establishing an empirically strong connection between executive pay and firm performance, Model C (phasing with performance hurdles but re-testing allowed) does best, both judged by the middle 50% of companies (£4996 for the Pay2 measure) and by examining the more extreme outcomes (£2769 for the lowest 10% and £8853 for the highest 10%). Once the re-testing facility is removed (in Models D and F) the pay-performance connection becomes much weaker, falling for the middle 50% in terms of the Pay2 measure to £3085 and £2526 respectively.

In the context of reporting expected (and, indeed, out-turn) values of executive share option schemes, it is interesting to recall the results presented in Table 3, which

demonstrates that the total (or average) costs of these schemes varies relatively little over models B, C and E. Whether measured by the 'Pay' or the 'Pay2' measure the average cost of these schemes is quite similar. By restricting re-testing (Models D and F), the overall costs can be reduced. But, in these last two cases, the pay-performance relationship is seriously weakened. In a similar vein, it is interesting to note that issuing options at a premium (or 25% to prevailing market price in the case of Model F) reduces costs fairly proportionately, but also reduces the pay-performance relationship.

5. Conclusions and Policy Implications

This paper has detailed several aspects of the recent moves by the ABI to condition what remuneration committees offer by way of executive share options. There are many motivations underlying these changes and we have focused on but one of them, namely the impact on the pay-performance relationship between the executive and the firm. What emerges in the results discussed above is that additional constraints, which attempt to raise the performance standard by raising the hurdle, may indeed succeed in enhancing the pay-performance connection. It is, however, possible to be overly restrictive - resulting in a hurdle that is set so high that few get over it, with the consequence that the connection between pay and performance is actually diminished (for example, Model D or Model F with no re-testing versus Model C).

In terms of effective communication with shareholders and other stakeholders, the very different results obtained with remuneration measure 'Pay' versus the measure 'Pay2' serves to emphasise the advantage of portraying the impact of pay-performance devices in a contemporaneous way, particularly as seen from the perspective of the executive. Of course, many of the 'paper' gains made and subsequently lost on an executive's option portfolio may well be discounted against this eventuality in the eyes of the executive, but the important thing is to offer an alternative perspective from the narrow ex-post out-turn option gains as included in the simple 'Pay' measure. This commonly used measure emphasises winners and fails to capture the ups and downs of executive share option holding - far from a one-way bet when they represent foregone or deferred basic remuneration.

Use of an evolving Black-Scholes method of valuing the executive's portfolio of share options, as in 'Pay2, produces a clear and timely result. Waiting to record the actual exercise of options and the realised gains, as in 'Pay', will record the same transfer of wealth form the shareholders to the executive, but it will be done in a way whereby the timing obscures the true nature of the relationship. On the other hand, as the ABI guidelines (2001, Appendix 2) recognise, the existence of performance hurdles and re-testing restrictions complicates the expected valuation of option grants.

From a policy perspective, it might be useful if the ABI and other involved parties could recommend boards and remuneration committees to set performance conditions that are

neither too easy nor to tough to achieve. Excessive severity in management incentive schemes is in no-one's interest. Furthermore, where performance conditions are set, they should possibly be tempered with a measure of generosity in terms of re-testing and re-issue of options[24].

In terms of accounting policy, there also seems to be a case for heading the pleas of the International Accounting Standards Board and encouraging the accounting profession to start reporting and recognising the expense of executive share option schemes, using methods that utilise Black-Scholes or some other market-equivalent based method of option valuation.

Government policy in this area seems to be developing along the lines of allowing shareholders to have a vote on the remuneration report[25]. As can be seen from the calculations above, such an arrangement will demand a considerable amount of elucidation of the likely characteristics of the recommended remuneration policy. Above all, these circumstances will reward a considerable amount of simplicity and transparency in the design of the remuneration scheme.

Finally, for boards and remuneration committees, the challenges are high and getting higher, but so too are the stakes. Increasing company performance through designing executive remuneration packages may seem a rather indirect approach, but for the non-executive members on the board it may offer the most effective route in the face of bounded rationality and informational asymmetry.

[24] Although, this last plea regarding re-issue becomes irrelevant under the new guidelines where annual issues of options are encouraged (as opposed to the previous reliance on a four-times-salary block issue).
[25] See DTI Press Release on 19 October 2001.

References

Accounting Standards Board (1994) "Disclosure of Directors' Share Options", Urgent Issues Task Force, Information Sheet No.11, UITF Abstract No 10, ASB, Holborn Hall, 100 Gray's Inn Road, London WC1X 8AL.

Association of British Insurers (1999) **Institutional Investment - Initiatives on responsible voting linking pay to performance**. Press release, July 19.

Association of British Insurers (2001) **Guideline s for Share Incentive Schemes.** (1 March) ABI, 51 Gresham Street, London EC2V 7HQ.

Association of British Insurers (1999) **Share-Based Incentive Schemes - Guideline Principles. Interpretation and Application in the Context of Currently Evolving Practice.** (19 July) ABI, 51 Gresham Street, London EC2V 7HQ.

Association of British Insurers (1995) **Share Option and Profit Sharing Incentive Schemes.** (February) ABI, 51 Gresham Street, London EC2V 7HQ.

Association of British Insurers (1994) **Long Term Remuneration for Senior Executives**, (May) ABI, 51 Gresham Street, London EC2V 7HQ.

Association of British Insurers (1993) **Share Scheme Guidance. A joint statement from the investment committees of the ABI and NAPF.** ABI, 51 Gresham Street, London EC2V 7HQ.

Association of British Insurers (1991) **Share Incentive Scheme Guidelines. Memorandum.** ABI, 51 Gresham Street, London EC2V 7HQ.

Association of British Insurers (1987) **Share Option and Profit Sharing Incentive Schemes. Summary of Revision to Guidelines to Requirements of Insurance Offices as Investors.** ABI, 51 Gresham Street, London EC2V 7HQ (13 July, addendum 6 May 1988, and amended 14 August 1991).

Blundell, John and Robinson, Colin (1999) Regulation without the State. London: Institute of Economic Affairs.

Buck, Trevor, Bruce, Alistair, Main, Brian G M, Udueni, and Henry (2001) 'Performance and Pay for UK Executives'. Discussion Paper (October).

Cadbury Committee (1992) The Financial Aspects of Corporate Governance. London: Professional Publishing Ltd.

Clark , Simon J. and Main, Brian G. M., (1995) 'The Governance of remuneration for senior executives: making use of options', **Hume Papers on Public Policy**, Vol. 3, No. 4

(Winter), pp. 59-77.

Conyon, Martin J. and Murphy, Kevin J. (2000) “The Prince and the Pauper? CEO Pay in the US and UK”. **Economic Journal**,

Department of Trade and Industry (1999) ‘Directors’ Remuneration. A Consultative Document’. A Consultative Document from the Company Law Review Steering Group. London: Department of Trade and Industry (July).

Greenbury, Sir Richard (1995) **Directors’ Remuneration. Report of a study group chaired by Sir Richard Greenbury**. London: Gee Publishing Ltd (July).

Hall, Brian J. and Murphy, Kevin J. (2000) “Stock options for undiversified executives”, Harvard Business School and USC Marshall School of Business, Working Paper (November).

Hampel, Ronnie (1998) **Committee on Corporate Governance.** Preliminary Report, August 1997; final report January 1998. London: Gee Publishing Ltd.

Main, Brian G. M. (1999) “The Rise and Fall of Executive Share Options in Britain” in Jennifer N. Carpenter and David Yermack (eds.) **Executive Compensation and Shareholder Value: Theory and Evidence**, London: Kluyer Academic Publishers, pp. 83-113.

Main, Brian G.M. (1994) "Reflections on institutional guidelines on top executive pay", **The Review of Policy Issues**, Vol.1, No.2, Autumn, pp.75-84.

Main, Brian G.M. (1993) "Pay in the Boardroom: Practices and procedures", **Personnel Review**, Vol.22, pp.1-14.

Main, Brian G.M., Bruce, Alistair and Buck, Trevor (1996) "Total board remuneration and company performance", **Economic Journal**, Vol. 106, No.439 (November), pp.1627-1644.

Main, Brian G.M. and Johnston, James (1993), "Remuneration Committees and Corporate Governance", **Accounting and Business Research**, Vol.23, No.91A, pp.351-362.

Main, Brian G.M., O'Reilly, Charles A., and Crystal, Graef S. (1994) "Over here and over there: A comparison of top executive pay in the UK and the USA", **International Contributions to Labour Studies**, Vol.4, pp.115-127.

O'Reilly, Charles A. III, Main, Brian G. M. and Crystal, Graef S. (1988) "CEO compensation as tournament and social comparison: A tale of two theories" **Administrative Science Quarterly**, Vol.33, (June), pp. 257-274.

Samuels, John and Lymer, Andrew (1996) 'The financial reporting of executive share options in the UK', **British Accounting Review**, Vol. 26, pp. 249-266.

Schizer, David M. (1999) 'Executive Stock Options and Derivatives: The Irony of Accident'. New York University Law School, mimeo (March).

Securities and Exchange Commission (1993) "Securities Act Release No. 6962 and No. 7009", Securities and Exchange Commission, Washington, D.C. 20549.

Yermack, David (1995) "Do corporations award CEO stock options effectively?" **Journal of Financial Economics**, Vol. 39, pp.237-269.

Appendix A

Names of Companies on the Study

Number	LBS Code	
1	4935	Adam & Harvey Group plc
2	44	Adwest Group plc
3	6255	Albert Fisher Group
4	101	Allied Colloids Group plc
5	98	Allied Domecq plc
6	118	Allied Textile Companies plc
7	152	Amber Industrial Holdings pl
8	6935	Amersham Intnl plc
9	6963	Antofagasta Holdings plc
10	304	API Group plc
11	9	APV plc
12	292	Asda Group plc
13	260	Ash & Lacy plc
14	286	Associated British Foods
15	359	Avon Rubber Co plc
16	753	B A T Industries plc
17	390	Baird(William) plc
18	6051	Banks (Sidney C)
19	447	Barr(A.G)& Co plc
20	465	Bass plc
21	486	Beales Hunter plc
22	6667	Bellway plc
23	561	Bertam Hldgs plc
24	576	Bibby(J)& Sons plc
25	599	Bisichi Mining
26	6104	Black Arrow Grp plc
27	603	Black(A & C)
28	604	Black(Peter)Hldgs
29	814	BOC Group
30	634	Bodycote International
31	6801	Bogod Group plc'A R V'
32	649	Booker plc
33	655	Boots Co plc
34	679	Bowthorpe plc
35	374	BPB plc
36	6802	Braime(TF&JH) 'A N.V'
37	698	Brammer plc
38	707	Breedon plc
39	721	Bridport-Gundry plc
40	763	British-Borneo Petroleum Syn
41	809	British Mohair Holdings
42	817	British Petroleum
43	4526	British Polythene Industries
44	844	British Vita plc
45	878	Brown(N) Group plc
46	896	Bryant Group plc

47	832	BSS Group plc
48	836	BTP
49	367	BTR plc
50	922	Bullough plc
51	924	Bulmer(H P) Hldgs plc
52	927	Bunzl plc
53	938	Burmah Castrol plc
54	949	Burtonwood Brewery
55	6882	Cable & Wireless plc
56	985	Cadbury-Schweppes
57	1030	Canning(W) & Co plc
58	1049	Carclo Engineering Group
59	6868	Carlton Communications plc
60	6228	Chamberlain & Hill
61	1154	Charter plc'Reg'
62	6109	Chemring Group plc
63	6052	Christies Intnl plc
64	1189	Church & Co plc
65	1319	Concentric plc
66	3066	Cookson Group
67	1367	Cooper(Frederick) plc
68	1408	Courtaulds plc
69	6234	Cradley Group Hldgs plc
70	6653	CRH plc
71	1450	Croda International
72	1453	Cropper(James)Co.
73	1497	Dalgety plc
74	1529	Davis Service Group plc
75	1542	De La Rue Co plc
76	1555	Delta plc
77	1591	Dewhirst plc
78	1592	Dewhurst plc 'ANV'
79	1610	Dinkie Heel plc
80	1611	Diploma plc
81	1659	Dowding & Mills
82	6949	Druck Holdings plc
83	6867	EBC Group plc
84	1776	EIS Group plc
85	1778	Electrocomponents plc
86	1791	Ellis & Everard
87	5152	EMI Group plc
88	6555	Eurotherm plc
89	1467	Falcon Holdings plc
90	6009	Ferguson International Hldgs
91	6254	Fife Indmar plc
92	1946	Fine Art Developments
93	6981	FKI plc
94	2010	Forminster plc
95	6204	Friendly Hotels
96	2101	Garton Engineering
97	2108	Gaskell plc
98	2124	General Electric
99	2304	GKN
100	2160	Glaxo Wellcome plc
101	2162	Gleeson (M J) Grp plc

102	2178	Glynwed Intl
103	2221	Grampian Holdings plc
104	2222	Granada Group plc
105	2227	Grand Metropolitan
106	6857	Graseby plc
107	2255	Greenalls Group plc
108	2257	Greene King plc
109	2307	Guinness plc
110	3316	Haden Maclellan Hldgs plc
111	2356	Halma Investments
112	2357	Halstead(James) Grp plc
113	2369	Hampson Industries plc
114	2381	Hanson plc
115	2389	Hardys & Hansons plc
116	6262	Harris (Philip) plc
117	2407	Harrisons & Crosfield plc
118	2432	Hawtin plc
119	6744	Haynes Publishing plc
120	2441	Hazlewood Foods plc
121	6519	Heath(Samuel) & Sons plc
122	2477	Hepworth
123	2491	Heywood Williams
124	2509	Highland Distilleries Co
125	2520	Hill & Smith Hldgs plc
126	6200	Holt (Joseph) plc
127	2624	Howden Group & Co
128	2650	Hunting plc
129	2679	IMI plc
130	6976	Intereurope Technlgy Svs plc
131	2810	Johnson Group Cleaners plc
132	2829	Jones,Stroud(Hldg)
133	2837	Jourdan (Thomas) plc
134	5719	Kingfisher plc
135	6058	Kwik-Fit Holdings plc
136	2987	Kwik Save Group
137	2998	Ladbroke Group plc
138	1019	Laird Group
139	3014	Lamont Holdings
140	3043	Laporte plc
141	3081	Leeds Group plc
142	1736	Linton Park plc
143	6028	Lookers plc
144	3261	Low & Bonar plc
145	6030	Macfarlane Group (Clans)
146	3373	Manders plc
147	3384	Mansfield Brewery plc
148	3400	Marks & Spencer
149	3419	Marston Thompson
150	1225	Matthew Clark plc
151	3447	Matthews(Bernard)
152	3313	McKechnie plc
153	3486	Menzies(J.)(Hldgs)
154	6840	Metal Bulletin plc
155	3507	Metalrax Grp plc
156	6955	Meyer International plc

157	7004	Microgen Hldgs plc
158	6530	Molins plc
159	6035	More Group
160	3614	Morgan Crucible
161	3618	Morland plc
162	3626	Morrison(W) Supermkts plc
163	3632	Moss Bros Group plc
164	3683	Narborough Plantations
165	6296	Nichols(J N)(Vimto) plc
166	3808	Northern Foods
167	3986	Pearson plc
168	4002	Peninsular & Orient'Dfd'
169	4021	Perry Group plc
170	4050	Photo-Me Internatnl plc
171	4081	Plysu plc
172	6309	Pochin's plc
173	4103	Portsmouth & Sund. News
174	4106	Powell Duffryn plc
175	1915	Premier Farnell plc
176	6076	Pressac Hldgs plc
177	4204	Racal Electronics plc
178	4259	Reckitt & Colman plc
179	4268	Redland
180	4289	Reed International plc
181	4294	Relyon Group plc
182	4300	RENTOKIL INITIAL
183	4325	Ricardo Group plc
184	4256	RMC Group plc
185	6783	Rolfe & Nolan plc
186	4412	Rotork plc
187	6964	Rowe Evans Invests plc
188	4345	RTZ Corp plc 'Reg'
189	4440	Rugby Group plc
190	4447	Russell(Alexander) plc
191	1761	Safeway plc
192	6046	Sainsbury(J) plc
193	4519	Scapa Group plc
194	4561	Scottish & Newcastle
195	4583	Sears
196	4639	Senior Engineering
197	4659	Sharpe & Fisher plc
198	4676	Shell Trnspt&Trd'Regd'
199	4683	Shiloh plc
200	4699	Siebe plc
201	4730	Sirdar plc
202	4740	Slingsby(H.C)plc
203	4754	Smith &Nephew Assd
204	505	Smithkline Beecham plc
205	4763	Smiths Industries
206	6047	Smurfit(Jefferson) Ir
207	4836	Spirax-Sarco Engr.
208	4883	Staveley Inds plc
209	4911	Sterling Industries plc
210	4931	Stirling Group plc
211	6339	Swan (John) & Sons

212	5061	Tate & Lyle plc
213	5077	Taylor Woodrow plc
214	5118	Tesco plc
215	6340	Thorpe (F.W.)
216	5255	TI Group plc
217	5162	Tilbury Douglas plc
218	5187	Tomkins plc
219	5188	Tomkinsons plc
220	5216	Transport Dev.Grp.
221	3154	Trinity Intnl Hldgs'LV'plc
222	6624	Ulster Television plc
223	5289	Unigate plc
224	5331	United News & Media plc
225	5388	Vaux Group plc
226	5472	Volex Group
227	5433	Waddington plc
228	5440	Wagon Industrial Hlds
229	5500	Watmoughs(Hldgs.)
230	5504	Watson & Philip
231	5505	Watts,Blake,Bearne
232	5524	Weir Group plc
233	5622	WF Electrical plc
234	4279	Whatman plc
235	5595	Whitbread plc
236	5666	Wilson(C.)Hldgs.
237	5694	Wolseley plc
238	5696	Wolstenholme Rink
239	5698	Wolverhampton & Dud Brew
240	6362	Wood(Arthur)& Son(Longport)
241	3607	Yorklyde plc
242	5755	Yorkshire Group plc
243	5760	Yule Catto & Co
244	5764	Zetters Group plc

Table 2

Descriptive Statistics
(mean values by year by Model Version)

Year	**Model A**		**Model B**		**Model C**		**Model D**		**Model E**		**Model F**	
	Pay	Pay2	Pay	Pay2	Pay	Pay2	Pay	Pay2	Pay	Pay2	Pay	Pay2
1988	597466	221674	224366	132645	190925	133524	190925	98893	180843	124832	180843	97698
1989	101956	165517	222838	213051	211671	228684	191679	181555	197788	207617	180846	168452
1990	100238	78686	149856	92547	143098	90484	129652	71750	135146	86104	123930	73837
1991	100056	104740	122494	125592	119476	137833	10942	111229	115060	125331	106627	106012
1992	207371	171759	129736	138024	124758	154158	110808	118727	119512	141549	108380	114401
1993	120311	149499	134940	172422	127578	217460	109224	146410	122603	191559	107353	134440
1994	129163	182122	170884	217561	158779	291297	120009	166611	150922	261902	116687	156251
1995	117054	88385	151164	98934	198367	65724	127629	75898	179129	62448	122133	77751
1996	220144	194173	168771	170323	202162	214637	138544	139947	187412	195069	132867	131867
1997	137958	126522	148471	133974	138237	128009	122083	107725	132534	123027	118836	108023

* ‘Pay’ is the value (£1997) of base pay plus all realised executive share option gains.
* * ‘Pay2’ is the value (£1997) of base pay plus all changes in the value of the holdings of executive share options.

Table 3
Present Value of Total Pay: Quartiles and Mean
(£1997)

	Model A	**Model *B***	***Model C***	***Model D***	***Model E***	***Model F***
PAY						
Lower-quartile	2031000	1872300	1661300	1490600	1568600	1440000
Median	2368000	2086700	2041200	1704600	1910700	1624200
Upper-quartile	2879500	2455900	2520600	2014700	2335700	1918900
MEAN	2535990	2202004	2168737	1838541	2043612	1766629
PAY2						
Lower-quartile	1629700	1676300	1731300	1347400	1587300	1302000
Median	1904000	1925300	2126800	1539600	1924900	1458400
Upper-quartile	2232700	2189300	2516800	1828300	2294400	1728100
MEAN	1994316	1999916	2215120	1632233	2025467	1564809

* ‘Pay’ is the present value (£1997) of base pay plus all realised executive share option gains.
* * ‘Pay2’ is the present value (£1997) of base pay plus all changes in the value of the holdings of executive share options.

Table 4
Regression Coefficients (t-statistics)

Mean Parameter	*Model A*	*Model B*	*Model C*	*Model D*	*Model E*	*Model F*
Pay:						
Lowest 10%	-3458	-481	-1401	-523	-1140	-456
	(5.96)	(2.36)	(4.49)	(4.21)	(4.62)	(4.14)
Lowest 25%	-2030	-115	-625	-246	-496	-212
	(6.59)	(0.18)	(3.63)	(4.46)	(3.57)	(4.63)
Middle 50%	282	683	942	391	780	318
	(3.62)	(14.16)	(10.81)	(8.73)	(11.24)	(9.12)
Highest 25%	3890	1939	3822	1896	3360	1726
	(12.79)	(16.61)	(16.77)	(1.19)	(16.97)	(15.43)
Highest 10%	6552	22839	5319	2862	4786	2687
	(11.40)	(12.21)	(10.00)	(12.32)	(10.31)	(11.99)
Pay2:						
Lowest 10%	1169	2004	2769	1666	2053	1209
	(12.01)	(25.92)	(30.48)	(20.64)	(25.92)	(17.12)
Lowest 25%	1796	2396	3450	2019	2708	1533
	(26.63)	(52.25)	(55.21)	(36.97)	(48.93)	(32.63)
Middle 50%	3197	3307	4996	3085	4210	2526
	(51.80)	(94.88)	(98.15)	(57.24)	(89.82)	(52.13)
Highest 25%	5026	4577	7445	4651	6712	4132
	(42.03)	(68.30)	(53.50)	(51.85)	(49.87)	(47.49)
Highest 10%	6189	5360	8853	5427	8092	4999
	(25.66)	(42.27)	(33.10)	(32.65)	(31.21)	(31.94)

- Pay and Pay2 defined in footnote to Table 3. Regresssion coefficients (b) from a regression: Pay = a + b (Total shareholder return) + e
- A: Base model; B: Phasing; C: Phasing +Relative Performance; D: Phasing +Relative Performance + No Retesting; E: Phasing +Relative Performance + Issue at a Premium; F: Phasing +Relative Performance + No Retesting + Issue at a Premium.

Figure 1a

Pay Outcomes over time (Model A, £1997)

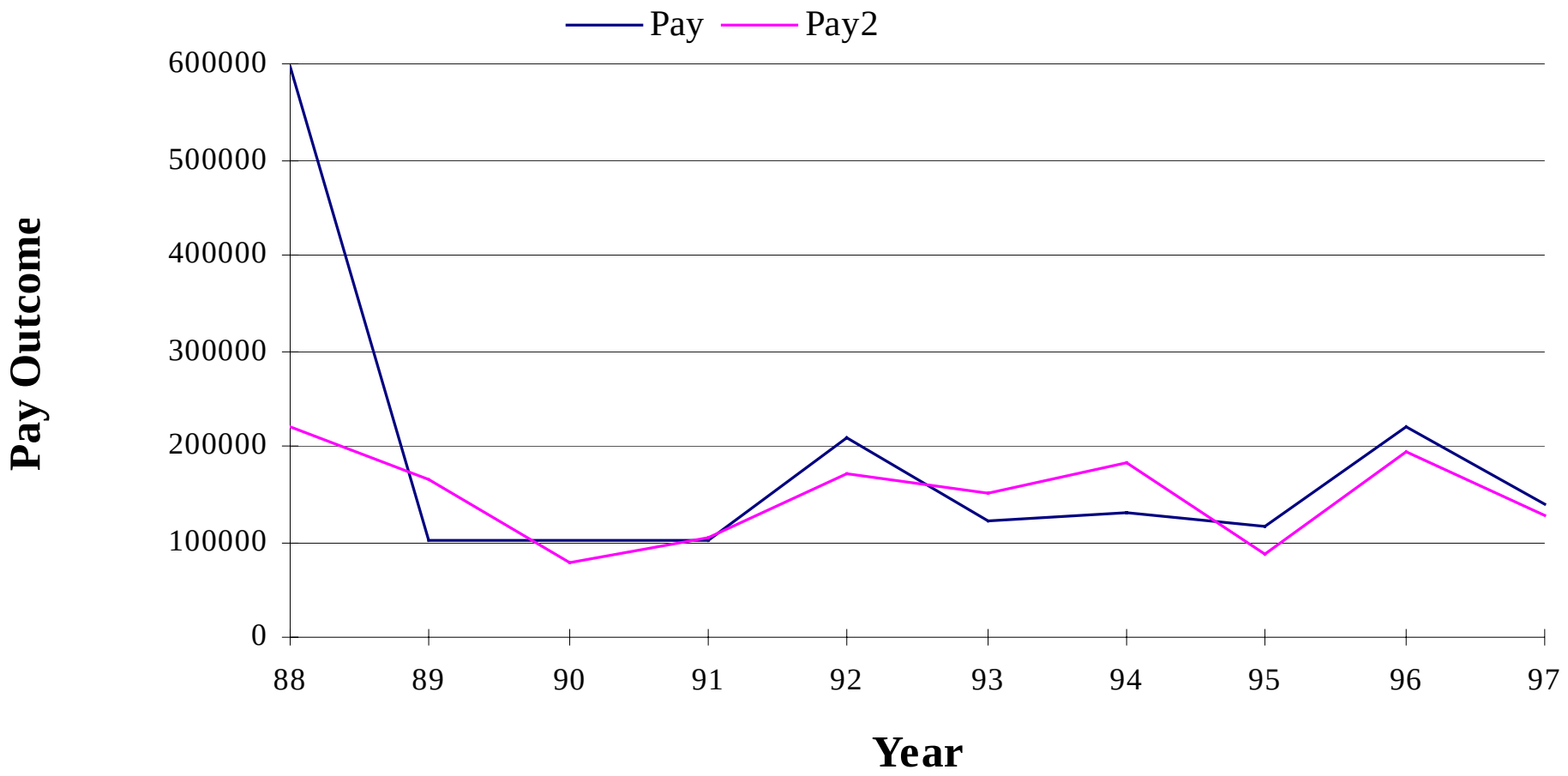

Figure 1b
Pay Outcomes over time (Model B, £1997)

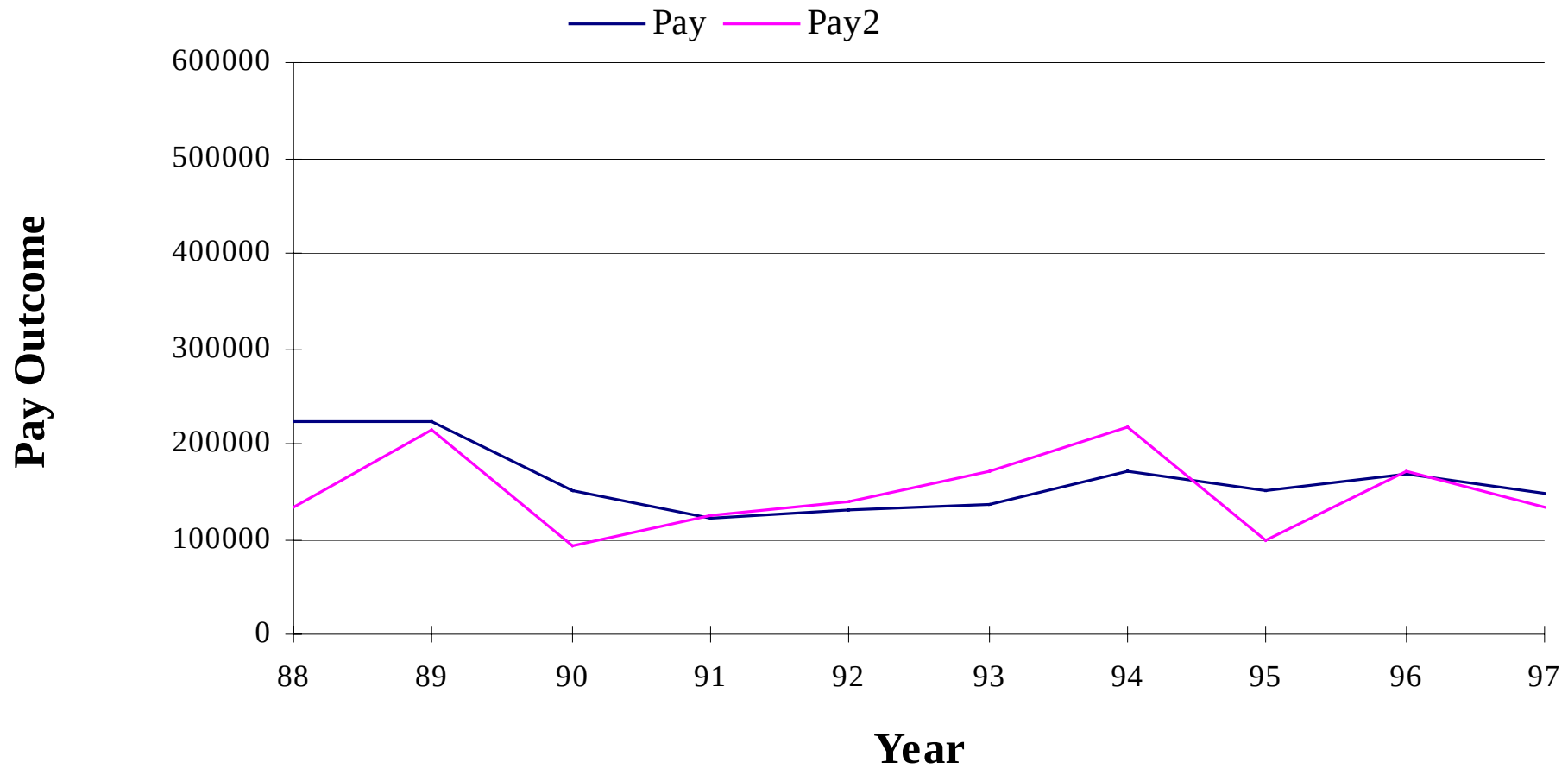

Figure 1c

Pay Outcomes over time (Model C, £1997)

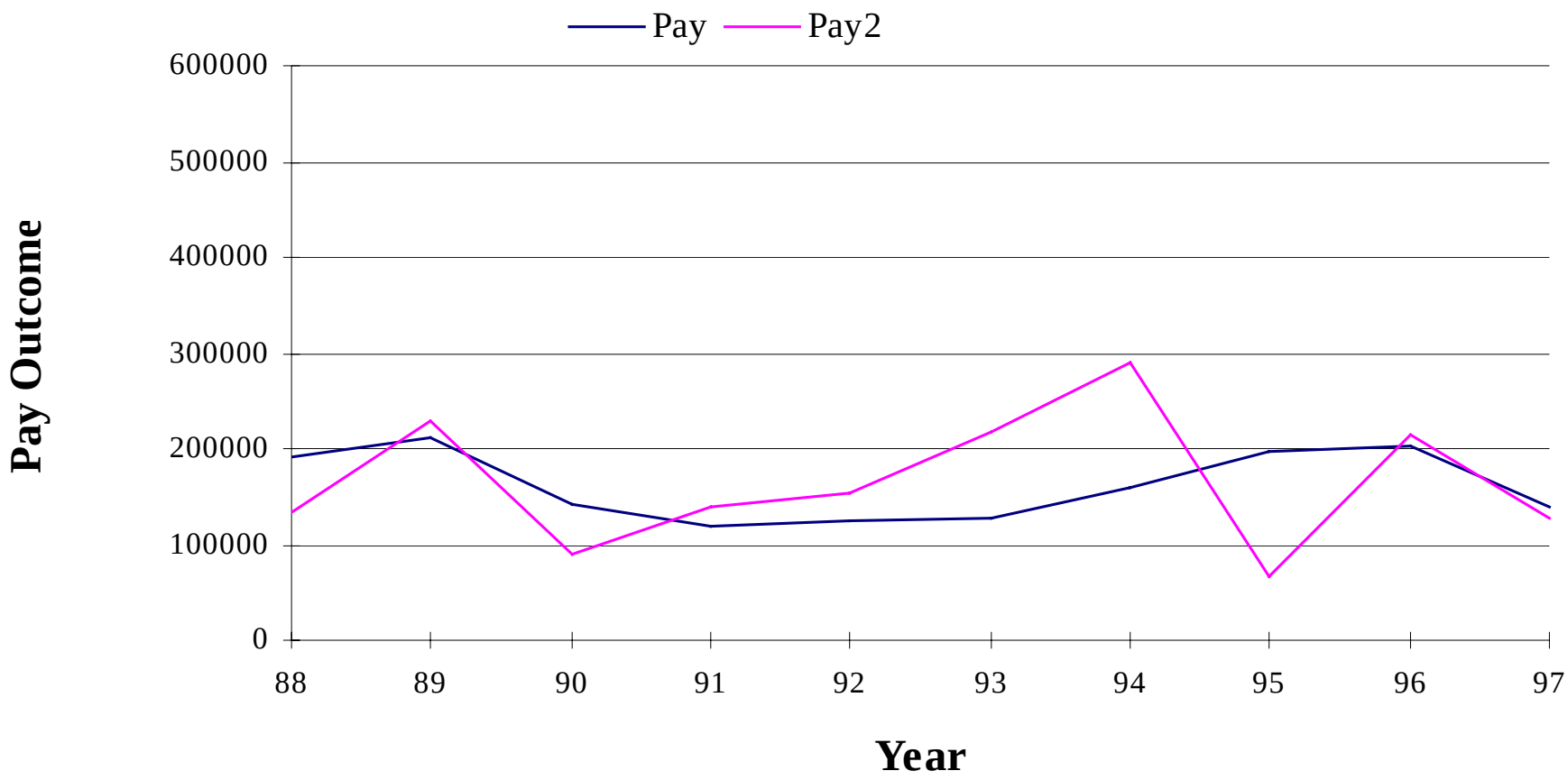

Figure 1d
Pay Outcomes over time (Model D, £1997)

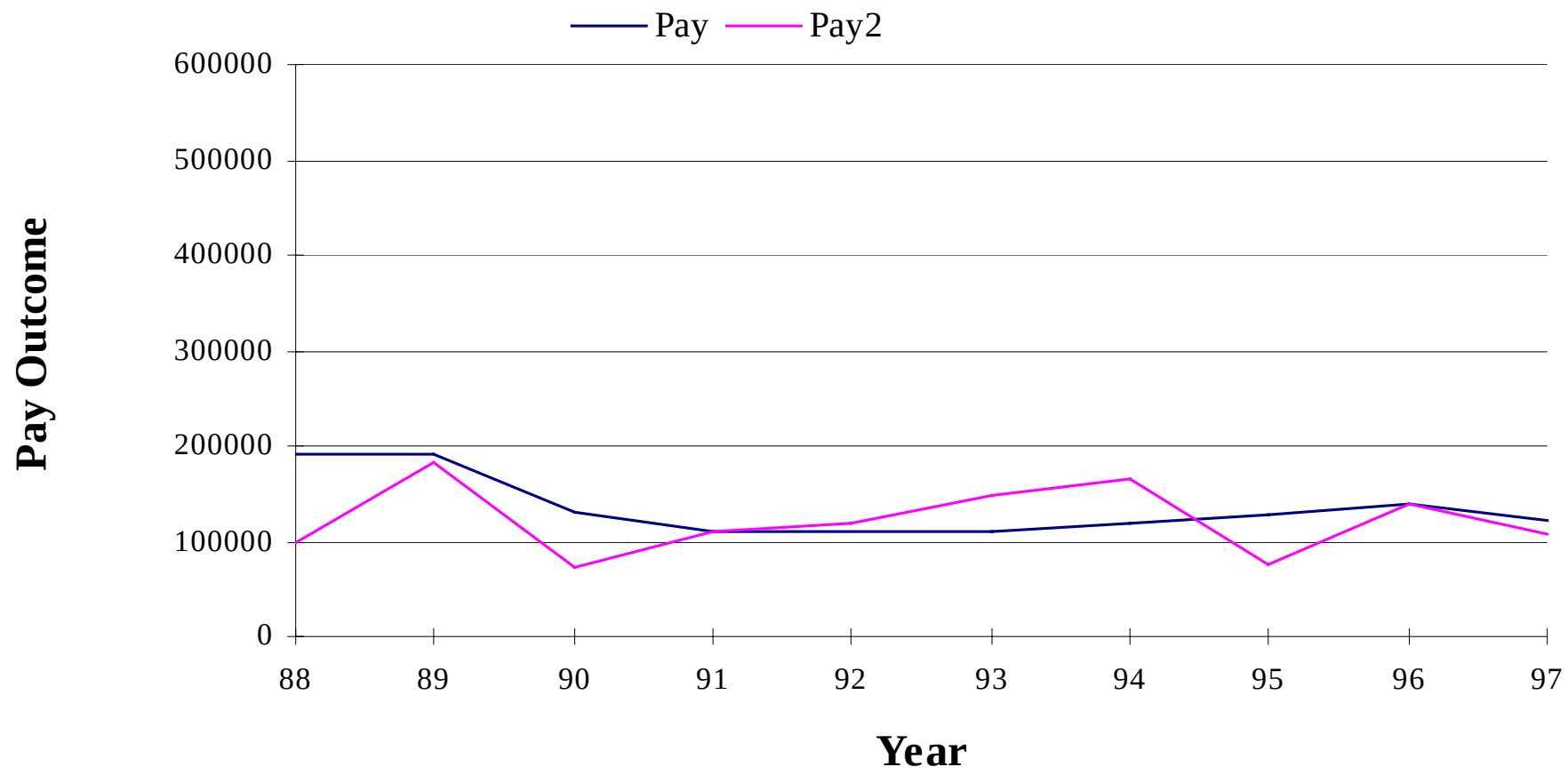

Figure 1e

Pay Outcomes over time (Model E, £1997)

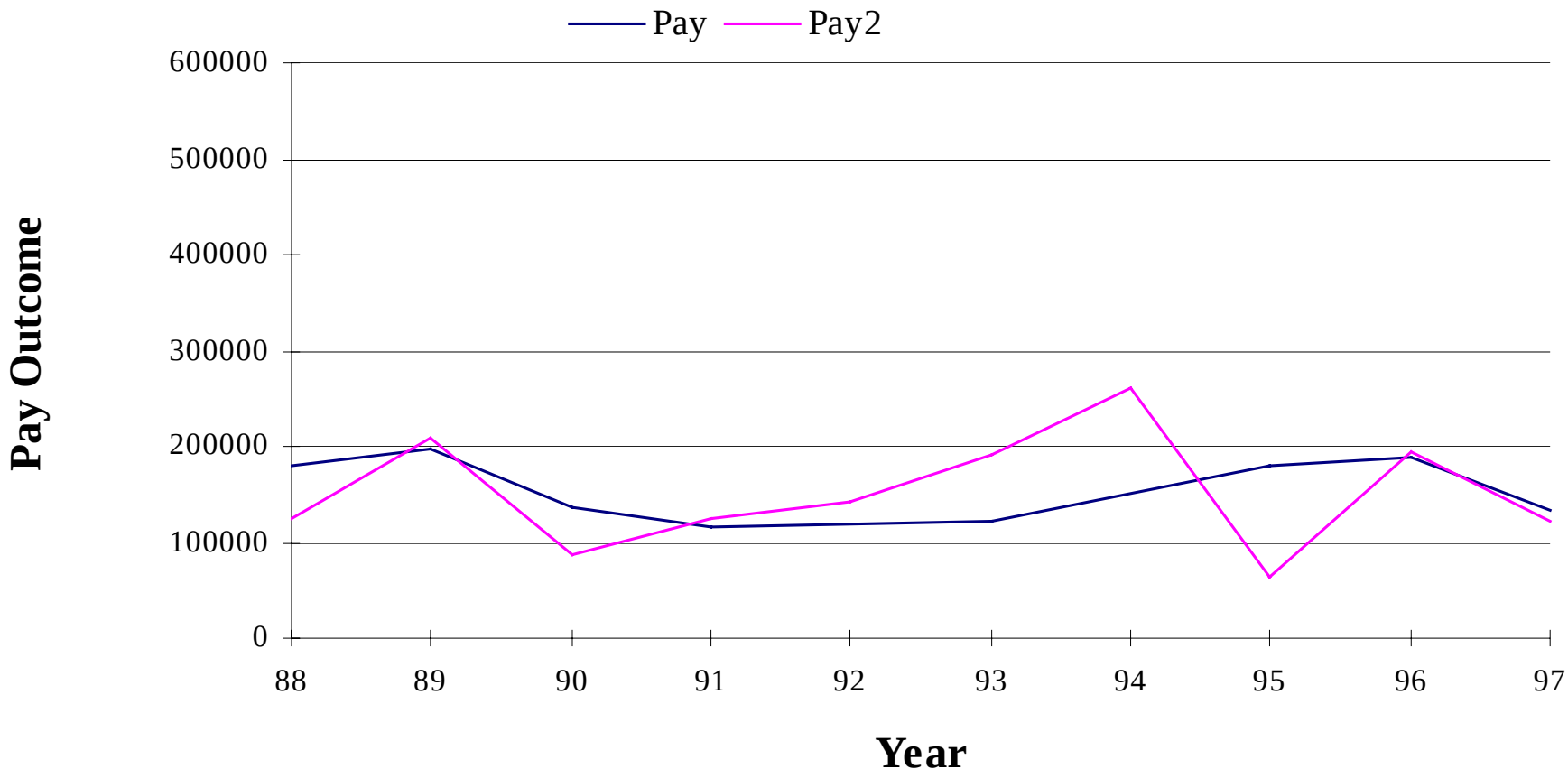

Figure 1f

Pay Outcomes over time (Model F, £1997)